

CLAIMS:

1. Method of controlling radiation power of a radiation source (25) comprising the steps of
 - a) measuring a radiated power of the radiation source (25),
 - b) calculating an error value (e) which is indicative of a difference between the
5 radiated power and a setpoint value (SP),
 - c) integrating the error value (e) to obtain an integrated error value by feeding the error value to an integrator (21),
 - d) multiplying the error value (e) with a factor p to obtain a proportional error value, and
10 e) driving the radiation source (25) with a current which is derived from the error value (e) by adding the integrated error value and the proportional error value, characterized in that method further comprises the steps of
 - f) providing a step signal (St) which indicates that the setpoint value (SP) is changed stepwise, and
15 g) temporarily stopping the integration of the error value (e) when the step signal (St) indicates a stepwise change in the setpoint value (SP).
2. Method as claimed in claim 1, characterized in that the integration of the error value (e) in step g is stopped until the error value (e) becomes smaller than a threshold value.
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3. Method as claimed in claim 1 or 2, characterized in that the method further comprises a step of resetting the integrator (21) after the step signal (St) indicates a stepwise change in the setpoint value (SP).
- 25 4. Method as claimed in one of the claims 1 to 3, characterized in that the integration of the error value (e) in step g is stopped by disconnecting the error value (e) from the integrator (21).

5. A radiation source driving device for controlling a radiation power of a radiation source (25) in an information reproducing and/or recording system for reproducing and/or recording information from/to an information carrier (11), comprising
- radiation power measurement means (26) for measuring a radiation power of the radiation source (25),
 - error value calculation means (20) for determining an error value (e) by calculating a difference between the measured radiation power (FB) and a setpoint value (SP),
 - integration means (21) for determining an integrated error value by integrating the error value (e),
 - multiplying means (23) for determining a proportional error value by multiplying the error value (e) with a factor p,
 - adding means (24) for determining a PI error value by adding the integrated error value and the proportional error value,
 - radiation source current generator (27) for feeding a current to the radiation source (25) wherein the current is dependent on the PI error value, characterized by blocking means (22) for temporarily stopping the integration means (21) from integrating the error value (e) in response to a step signal (St) indicating a stepwise change in the setpoint value (SP).
6. A radiation source driving device as claimed in claim 5, characterized in that the blocking means (22) comprise switching means (SW) for connecting and disconnecting the error value (e) to the integration means (21) and wherein the blocking means (22) stop the integration means (21) from integrating the error value (e) by disconnecting the error value (e) from the integration means (21) by controlling the switching means (SW).
7. A radiation source driving device as claimed in claim 5 or 6, characterized in that the blocking means (22) are arranged to stop the integration means (21) from integrating the error value (e) until the error value (e) is smaller than a threshold value.
8. A radiation source driving device as claimed in one of the claims 5 to 7, characterized in that a first value of the step signal (St) indicates that information is reproduced from the information carrier (11) and a second value of the step signal (St) indicates that information is recorded to the information carrier (11).

9. A radiation source driving device as claimed in one of the claims 5 to 8, characterized in that the integration means (21) are reset in response to the step signal (St).
- 5 10. Information reproducing and/or recording device for reproducing and/or recording information from/to an information carrier (11) comprising
- a radiation source driving device as claimed in one of the claims 5 to 9,
 - a radiation source (25) for generating a radiation beam, which radiation source (25) is driven by the radiation source driving device,
 - 10 - means (36) for mapping the radiation beam at a spot (33) on the information carrier (11), and
 - means (31) for causing a relative displacement between the spot (33) and the information carrier (11).